The Existence of Socio-Cultural Value in Bompon Watershed Community in Globalization Era

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Abstract. The research aims are to explain (1) socio-cultural conditions, (2) socio-economic conditions, and (3) the village government's role in maintaining the existence of social, cultural and economic values. This study uses a descriptive qualitative approach. The data is collected by observation, interview and documentation. The research objectives are village government, custom shop and the community. The results of the study show that (1) the socio-cultural conditions have not been touched by the outside community; therefore, ethnicity and culture in Bompon area are still thick with Javanese customs (2) The village government and traditional leaders make a simple effort to increase cultural awareness in the era of globalization, which is to provide understanding and teaching about local culture from generation to generation and the issuance of village regulations on private ownership rights.

Keywords: Bompon watershed, Local culture, Social change, The existence of social

1. Introduction

Natural resources in the form of *flora / fauna* , land, and water are an asset and foundation of development that is very vital in every region. Awareness of the importance of maintaining biodiversity is needed not only for the interests of the Indonesian people but also for the benefit of the world community as a whole and directed towards long-term interests. Good management of natural resources will improve human welfare, and vice versa if the management of natural resources that are not good will have a bad impact on humans [1]. Therefore, good management of natural resources is needed in order to produce maximum benefits for humans by not sacrificing the preservation of natural resources themselves.

Land as a system has components that are specifically organized and their behavior leads to certain goals. The components of this land can be viewed as resources in relation to human activities in meeting their life needs [2]. Thus there are two main categories of land resources, namely (a) natural resource land and (b) land resources which are the result of human activities (human cultivation). Based on the conception, the definition of land resources includes all the characteristics of land and the processes that occur in it, which in certain ways can be used to meet the needs of human life [3].

According to Rum-ney [4] that there are six climate characteristics that have an important impact on land use, namely (a) temperature, (b) precipitation, (c) insulation, (d) wind speed, (e) *evaporation*, and (f) various extreme and dangerous conditions.

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Meanwhile, land resources are also an important component in the land system. Land can be seen as a landscape with its own surface and landform, and has a typical soil profile and internal characteristics, such as mineral composition and chemical properties, and geophysical properties. Land can also be seen as a loose, natural body that covers a large part of the earth's surface and has a very important role for life as a growing medium of plants that are a source of human food [5]. Most of the activities of human life have been, are being, and will continue on the ground not above rocks, ice fields, air, or water [6].

Likewise water as one of the land resources also has important meaning, its nature is relatively stable and cyclical, within certain limits it can be engineered by humans. Such cyclical properties can be seen in various phenomena of hydrological processes. These processes will at one time determine the carrying capacity of land and its land degradation. Water as an agricultural resource is used by plants, livestock and humans.

The Bompon watershed is a watershed that has characteristics in terms of soil geomorphology. The Bompon watershed is located in the transition zone between Menoreh Mountains, Sumbing Tua Mountain and Sumbing Muda Mountain. Surface and subsurface materials are dominated by soil resulting from deposition and weathering of volcanic material from the Menoreh Mountains, Tua Sumbing Mountain and Sumbing Muda Mountain. Weathering of material is not only from *exogenous* processes (climate), but also comes from alteration processes and subsurface intrusions. As a result of this process , the soil in each morphology in the Bompon watershed has a depth of up to 30 meters. Thick soil in the Bompon watershed has distinctive characteristics that make the soil quite erodible [7].

Based on the geomorphological conditions possessed by the Bompon watershed that affect land resources and the condition of the land. In an effort to make ends meet , the Bompon watershed community has a variety of ways or strategy to remain last life with utilizing natural resources owned.

Strategy or effort taken for last life that is make use of source power nature and treats environment natural through wisdom Local *(local wisdom)* Local wisdom in foreign languages is often conceptualized as *local wisdom* , *local knowledge* or *local genius* . Local wisdom can also be interpreted as a thought about life. The thought is based on clear reasoning, good thinking, and contains positive things. Local wisdom can be translated as works of reason, feelings of depth, character, form of temperament, and encouragement for human glory. In a particular community local wisdom can be found that is related to natural resource management as a local governance arrangement that has existed since the past with history and long-standing adaptations. Local wisdom does not only function as a characteristic of a community, but also serves as an effort to preserve the ecological environment of a community and as a way to sustain life by making local wisdom a way to earn income.

Thus the author tries to uncover the problem as follows: How is the local wisdom of the Bompon watershed in utilizing land resources as a source of community income?

2. Method of Research

This study uses a qualitative method. The location of this study is in the Bompon watershed located in Salaman and Kajoran Subdistricts, Magelang District, Central Java. The data collection method used in this study is by observation, interviews, and documentation. While the data sources in this study are divided into two sources, namely primary data sources and secondary data sources. The primary data sources in this study were obtained directly

through interviews and observations with informants or field information. The subjects in this study were communities around the Bompon watershed area which consisted of Margoyoso Village in Salaman Subdistrict, Wonogiri Village and Kuwaderan Village in Kajoran District. The purpose of this study was to analyze the condition of the land resources found in the villages included in the Bompon watershed flow, analyzing the economic conditions of the community, and to find and to analyze the role of local wisdom used by the community in an effort to obtain community income.

3. Result and Discussion

3.1 Bompon Watershed Geomorphological Condition

The Bompon Watershed is located in Salaman and Kajoran Subdistricts, Magelang District, Central Java. The Bompon watershed is composed of unique geomorphological conditions. The uniqueness of the geomorphological conditions consists of relief conditions, chronology, arrangements, and rock types that distinguish from geomorphological conditions elsewhere. One of the unique geomorphological conditions in the Bompon watershed is the condition of the slopes. The dominant condition of the Bompon watershed slope is composed of >15% slope which causes the geomorphological process in the form of landslides and dominant erosion. The type of constituent material in the Bompon watershed has a large influence. The constituent material in the Bompon watershed consists of the material of the Old Sumbing Mountain, the Young Sumbing Mountain and the Menoreh Mountains material which forms a super thick (> 20 m) soil layer. Therefore the land conditions of the Bompon watershed often experience erosion and landslides on a fairly large scale. The following is an illustrated map of the location of the Bompon watershed area as well as a soil erosion threshold map. (Figure 1)

Based on the map of the area above it can be seen that the shape of the bompon river basin includes two sub-districts and sub-district Kajoran Salaman.

Bompon watershed arranged on six unit form land , namely (a) Puncak Bukit, (b) Slope Above, (c) Eastern Slope, (d) Slope Down, (e) Walking Slope Koluvial, and (f) Plain Koluvial [8]. Unit form land in the watershed Bompon shows the condition morphology ,material as well the process .

The Bompon watershed was originally a plateau, but over time, the slope dynamics such as landslides and erosion due to the effects of high rainfall formed the Bompon watershed configuration as it is now. The Bompon watershed is composed of surface cover material in the form of volcanic ash and dust from the eruption of the Sumbing Volcano. The bottom material has more variation, ie the breccias are aligned along with the weathered tuff. This subsurface material is known based on outcrops at the mouth of the watershed.

The large number of erosion events in the Bompon watershed makes the Bompon watershed a watershed that needs conservation. The Bompon watershed is also a sub-watershed of the Bogowonto watershed which is included in the priority watershed for conservation according to the Decree of the Ministry of Forestry of the Republic of Indonesia with Decree. 328 / Menhut-II / 2009. Selection of appropriate geomorphological conservation techniques as an effort to manage watershed in the Bompon watershed is important to control erosion. Erosion that is widely formed can be caused due to the use or processing of land that

is not in accordance with its capabilities [9]. Trench erosion is a type of erosion that has the most impact on environmental damage.

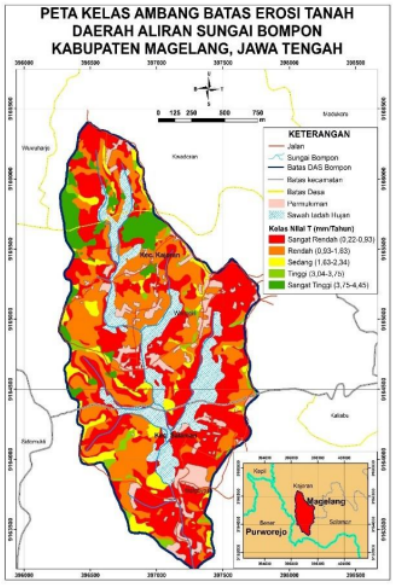

Figure 1. Illustration of the location of the Bompon watershed area.

The real impact can be seen from the loss of soil and the amount of sedimentation in the downstream [10]. [11] revealed that 10 to 90 percent of land loss was caused by trench erosion. Trench erosion is included in sub surface erosion which can erode B horizon due to increased flow concentration [12]. Trench erosion can also be formed from the presence of subsurface flow. The subsurface flow can emerge as seepage and groove erosion forms which can then develop into trench erosion because the continuous seepage has the potential to become surface runoff [13]. Trench erosion can be found in three land uses, namely settlements, moorings and mixed gardens [14]. Conservation techniques that are used as one of the efforts to overcome the effects of landslides and erosion that often occur in the Bompon watershed are the implementation of a trench erosion system, especially in how to manage land with an agroforestry system.

The trench erosion density is then classified into three classes, namely high, medium and low density. The classification of the trench erosion density is based on the amount of data and the distribution of the data itself (Figure 2).

Figure.2 Distribution of Erosion of Bompon Watershed Trenches

Trench erosion distribution shows that the trench erosion process can be accelerated by land-use patterns. Trench erosion predominantly occurs in dry land and mixed gardens because of the influence of intensive land processing.

3.2 Local Wisdom As The Main Income Of The Community Of Bompon

Local wisdom in the past decade has been widely discussed. The Talk about local wisdom is often associated with local communities and with varying understanding. Local wisdom is local (local) ideas that are wise, full of wisdom, good value that are embedded and followed by community members [15]. According to the formula issued by the Ministry of Social Affairs, local wisdom is interpreted as a view of life and knowledge as well as various life strategies in the form of activities carried out by local communities in answering various problems in meeting their needs. The system of fulfilling their needs must cover all elements of life such as religion, science, economics, technology, social organizations, language and communication, and the arts.As one of the villages included in the Bompon watershed area, Wonogiri Village has the same type of local wisdom in general with other villages around the Bompon watershed area. Landslides that occurred in the past have in fact made them more aware of maintaining the natural resources they have as a source of livelihood to meet their daily needs.The type of land use in the Bompon watershed consists of: settlements / yards, fields, fields, forests, mixed gardens and others.

The landslide disaster that hit several villages included in the Bompon watershed area made the community have a different perspective on the landslide disaster that occurred. The perspective consists of two types, namely landslide disaster as a disaster and landslide disaster as a gift. A landslide disaster is considered a disaster because it causes losses to the

community, which includes loss of residence, disrupting sources of livelihood, and transportation routes being cut off. Meanwhile, landslide disasters are also considered a blessing because it fosters public awareness of landslide mitigation, agricultural land becomes more fertile and easier to manage so that arises of cropping systems (agroforestry). Widyanto (2013) said that agroforestry as an optimal land use method, which combines biological production systems that have short and long rotations (a combination of forestry production and other biological production) in a manner based on the principle of sustainability, simultaneously or sequentially, in forest area or outside that aims to achieve community welfare. Mixed gardens are very widely found in low-lying areas, especially in alluvial plains and hilly valleys. The various types of land use will affect the hydrological and geomorphological conditions. The use of fertilizers and chemical drugs will change the quality of surface water in rice fields. Likewise, forest conservation that is not correct will cause disturbed hydrological balance. Making terraces and cutting cliffs that do not pay attention to the geomorphological aspect results in a lot of land erosion, therefore proper land conservation is needed [16].

The type of local wisdom that is believed by the people of Wonogiri Village and other villages included in the Bompon watershed area through land conservation methods in the form of trench erosion distribution, namely processing land resources using an agroforestry system. The Agroforestry system produces a variety of commodities that can be used as a source of income for the surrounding community. These commodities include rice, secondary crops, coconut, sugar cane, and others. The productivity of the plant is divided into three groups, namely daily, monthly, and yearly so that these conditions make the surrounding community have different income levels depending on the type of plants they plant.One of the plants whose productivity is daily is coconut trees because all the components in the coconut tree can be processed. One component that is used by the community every day is taking coconut water called "sap". The process of taking or tapping coconut water is done twice a day, namely in the morning and evening. The sap water that has been accommodated in the barn which is right in the coconut flower is then processed to become palm juice or commonly known as "palm sugar".

The sap which has been processed and becomes palm sugar is then sold to local stall owners and then distributed to the market. The daily income obtained from the processing of Nira is very dependent on how much water the sap is obtained on each tree, one kilogram of sap that has been processed into sugar is usually sold at a price range of Rp. 14,000 - Rp. 15,000. The processing of this sap has become a source of income for the community for their daily needs.

4. Conclusion

The types of land use in the Bompon watershed consist of: settlements / yards, rice fields, moorings, forests, mixed gardens and others so that landslide disasters are also considered a blessing because growing public awareness of landslide mitigation, agricultural land becomes more fertile and manageable so that the system emerges planting mixed gardens (agroforestry). The natural resource processing system using the mixed garden method is a form of local wisdom in the Wonogiri village communities and villages that are included in the Bompon watershed area. There are various types of commodities that are the source of

income for surrounding communities such as rice, secondary crops, coconut, sugar cane, and others.

Coconut is one of the commodities in the agricultural system that uses mixed garden methods as well as a source of daily income for the economy of the surrounding community. One component that is used by the community every day is to take coconut water called "sap" or commonly known as "palm sugar". The sap which has been processed and becomes palm sugar is then sold to local warung owners and then distributed to the market. The daily income obtained from the processing of Nira is very dependent on how much water the sap is obtained on each tree. Nira has become the main source of livelihood for people around the Bompon watershed to meet their family's daily needs.Further research is needed regarding the local wisdom of the people in the Bompon watershed, given the limited time and knowledge of the researchers, so that there are still many things that need to be studied. By knowing more about the local wisdom of the community, it is hoped that it will become a capital in determining the ideal form of development carried out at the research site.

References

[1] Aulia, T., & Dharmawan, A. (2010). Local wisdom of water resource management in Kampung Kuta. *Sodality*, *04*(03), 345–355.

[2] S Worosuprojo. (2007) Pengelolaan Sumberdaya Lahan Berbasis Spasial dalam Pembangunan Berkelanjutan di Indonesia. Fakultas Geografi UGM

[3] Juhadi. (2007). DINAMIKA PEMANFAATAN LAHAN PADA KAWASAN PERBUKITAN KASUS DAS SERANG KULON PROGO Juhadi Jurusan Geografi FIS UNNES. Jurnal Geografi, 4(2).

[4] H.L.VaderC.L.J.Vink. (1975) The influence of viscosity on dilution methods its problems in the determination of serum sodium. Elsevier

[5] RJ Schaetzl, S Anderson. (2005) Soils, paleosols, and environmental reconstruction. Cambridge University Press

[6] R Paris, F Lavigne, P Wassmer, J Sartohadi. (2007). Coastal sedimentation associated with the december 26, 2004 tsunami in lhok nga, west banda aceh (sumatra, indonesia). Marine Geology, 2007 – Elsevier

[7] Kusuma, G. M. (2017). Teknik, Efektivitas Dalam, Konservasi Erosi, Pengendalian Upaya, Sebagai Dengan, Pengelolaan D A S Kusuma, Garri Martha. Universitas Gajah Mada,Etd.Repository.Ugm.Ac.Id, 1–6.

[8] Rokhmaningtyas, R. P. (n.d.). Estimasi Kehilangan Tanah Aktual Terkait Pengaruh Vegetasi Di Das Bompon Kabupaten Magelang.

[9] Amiri, F., Rashid, A., & Shariff, B. M. (2012). Application of geographic information systems in land- use suitability evaluation for beekeeping : A case study of Vahregan watershed (Iran). African Journal of Agricultural Research, 7(1), 89–97. https://doi.org/10.5897/AJAR10.1037

[10] Nazari, A., Ahmadi, H., Jafari, M., Boggs, G., Ghoddousi, J., & Malekian, A. (2009). Journal of Asian Earth Sciences Geomorphic threshold conditions for gully erosion in Southwestern Iran (Boushehr-Samal watershed). Journal of Asian Earth Sciences, 35(2), 180–189. https://doi.org/10.1016/j.jseaes.2009.02.004

[11] J Poesen, J Nachtergaele, G Verstraeten, C Valentin (2003) Gully erosion and environmental change: importance and research needs. Elsevier

[12] Y Budianto, J Sartohadi (2016). Keterdapatan sensitive clay pada lokasi longsorlahan di DAS Bompon, Kabupaten Magelang, Jawa Tengah. Jurnal Bumi Indonesia

[13] GV Wilson, RF Cullum, MJM Römkens - Catena, (2008) Ephemeral gully erosion by preferential flow through a discontinuous soil-pipe. Elsevier

[14] Savitri, E. & Pramono, I. B. (2017). E-issn: 2579-5511/ p-issn: 2579-6097. Jurnal Penelitian Pengelolaan Daerah Aliran Sungai, 1(2), 97–110.

[15] E Savitri, IB Pramono (2017) Reklasifikasi Peta Penutupan Lahan untuk Meningkatkan Akurasi Kerentanan Lahan. Jurnal Wilayah Dan Lingkungan

[16] Juhadi. (2010). Pola-pola Pemanfaatan Lahan dan Degradasi Lingkungan Pada Kawasan Perbukitan. Jurnal Geografi - FIS UNNES, 4(1), 11–24.

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